What is claimed is:

1   1.   A system for concurrently displaying respective images
2 representing real-time data and non-real-time data, comprising:
3   a source of signals representing real-time data;
4   a source of signals representing non-real-time data;
5   a display device for displaying images;
6   a processor, coupled to the real-time data source, the non-
7 real-time data source and the display device, the processor:
8   executing a windowing operating system
9   controlling the operation of an application program
10   for receiving non-real-time data and conditioning the
11   display device to display an image representing the
12   non-real-time data; and
13   executing a real-time display process,
14   independent of the execution of the operating system,
15   for receiving the real-time data and conditioning the
16   display device to display an image representing the
17   real-time data concurrently with the display of the
18   non-real-time data.

1   2.   The system of claim 1, wherein:
2   the real-time data signal source is a network with a
3 specified latency limit; and
4   the real-time display process receives the real-time data
5 and displays the real-time data representative image within the
6 specified latency limit.

1   3.   The system of claim 1 wherein the real-time display
2 process operates as a single thread.

1   4.   The system of claim 3 wherein the real-time display
2   process thread is assigned a priority higher than the
3   application program.

1   5.   The system of claim 3 wherein:
2   the windowing operating system provides a graphics display
3   interface for conditioning the display device to display a
4   specified image; and
5   the real-time display process thread provides instructions
6   to the graphics display interface to display the real-time
7   image.

1   6.   The system of claim 1, wherein:
2   the application program may malfunction such that the non-
3   real-time data representative image obscures the real-time data
4   representative image;
5   the system further comprises a source of user input
6   signals; and
7   the processor, in response to a user input signal, reveals
8   the real-time data representative image.

1   7.   The system of claim 6 wherein the user input signal
2   source comprises a keyboard, and the user input signal comprises
3   a key combination.

1   8.   The system of claim 6 wherein the user input signal
2   source comprises a mouse, and the user input signal comprises a
3   mouse click.

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1   9.   The system of claim 1, wherein:

2   the windowing operating system maintains information

3   relating to the availability of resources; and

4   the processor further executes a monitor process for

5   monitoring the resource information and for taking corrective

6   action if the resource information indicate that the

7   availability of a resource is below a predetermined level.

10.   The system of claim 9 wherein the resource information

maintained by the windowing operating system maintains comprises

information related to:

memory resources;

system resources;

computer resources; and

process resources.

1   11.   The system of claim 9 wherein the corrective action

2   taken by the processor comprises:

3   modifying execution parameters of the application program;

4   terminating the application program; and

5   sending a notification to the user.

1   12.   A method for concurrently displaying respective images

2   representing real-time data and non-real-time data, comprising

3   the steps of:

4   receiving non-real-time data;

5   receiving real-time data;

6   executing a windowing operating system for controlling the

7   operation of an application program responsive to the non-real-

8   time data, for conditioning a display device to display

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9   respective images representing the non-real-time data;

10   executing a real-time display process, independently of the

11   windowing operating system, for conditioning the display device

12   to display respective images representing the real-time data

13   concurrently with the display of the non-real-time data.

1   13.   The method of claim 12 further comprising the step of

2   executing the real-time display process as a single thread.

1   14.   The method of claim 13 further comprising the step of

2   assigning the real-time display process thread a higher priority

3   than the application program.

1   15.   The method of claim 13 wherein

2   the windowing operating system execution step comprises the

3   step of executing a graphics display interface to receive

4   instructions for generating images; and

5   the real-time display process execution step comprises the

6   step of providing instructions to the graphics display interface

7   to display the respective images representing the real-time data

1   16.   The method of claim 12 further comprising the steps

2   of, if the application program malfunctions such that the non-

3   real-time data representative image obscure the real-time data

4   representative image:

5   receiving user input data; and

6   revealing the real-time representative data in response to

7   the user input data.

1   17.   The method of claim 16 wherein the step of receiving
2 user input data comprises the step of receiving a key
3 combination from a keyboard.

1   18.   The method of claim 16 wherein the step of receiving
2 user input data comprises the step of receiving a mouse click
3 from a mouse.

     19.   The method of claim 12 wherein:
     the step of executing the windowing operating system
comprises the step of maintaining information relating to the
availability of resources; and
     the method further comprises the step of:
     executing a monitor process for
               monitoring the resource information; and
               taking corrective action if the resource
          information indicates that the availability of a
10   resource is below a predetermined level.

1   20.   The method of claim 19 wherein the step of monitoring
2 the resource information comprises the steps of:
3   monitoring memory resources;
4   monitoring system resources;
5   monitoring computer resources; and
6   monitoring process resources.

1   21.   The method of claim 19 wherein the step of taking
2 correcting action comprises the steps of:
3   modifying execution parameters of the application program;

4   terminating the application program; and

5   sending a notification to the user.